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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/590,477	08/21/2012	Stuart D. Cheshire	APL-P3624USC2	1040

63975 7590 02/01/2017  
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EXAMINER
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NGUYEN, THAI

ART UNIT	PAPER NUMBER
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2469

NOTIFICATION DATE	DELIVERY MODE
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02/01/2017

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* STUART D. CHESHIRE

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Appeal 2015-006227  
Application 13/590,477  
Technology Center 2400

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Before JOHN A. JEFFERY, JUSTIN BUSCH, and CARL L. SILVERMAN,  
*Administrative Patent Judges.*

JEFFERY, *Administrative Patent Judge.*

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner’s decision to reject claims 1, 4–8, 11–15, and 18–21. Claims 3, 10, 17, and 22–24 have been indicated as containing allowable subject matter, and claims 2, 9, and 16 were cancelled. Final Act. 1, 6; App. Br. 3.<sup>1</sup> We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

STATEMENT OF THE CASE

Appellant’s invention determines whether a domain-name system (DNS) server suffers from a particular functional limitation by sending an

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<sup>1</sup> Throughout this opinion, we refer to (1) the Final Rejection mailed April 28, 2014 (“Final Act.”); (2) the Appeal Brief filed October 30, 2014 (“Br.”); and (3) the Examiner’s Answer mailed April 6, 2015 (“Ans.”).

exploratory query to the server, where the query is constructed to detect the server's functional limitation without causing the server to fail. *See generally* Abstract. Claim 1 is illustrative:

1. A method for determining if a domain name system (DNS) server is functionally limited, comprising:

generating an exploratory query that comprises a set of labels;

sending the exploratory query to the DNS server to detect a functional limitation in the DNS server, the functional limitation causing the DNS server to, based on reading less than all of the labels in the set of labels in the exploratory query, send a response to the exploratory query;

receiving a response to the exploratory query from the DNS server;  
and

when the response indicates that the functional limitation exists in the DNS server, performing a remedial action.

## THE REJECTIONS

The Examiner rejected claims 1, 5–8, 12–15, and 19–21 under 35 U.S.C. § 103(a) as unpatentable over Banga (US 7,426,576 B1; Sept. 16, 2008) and Gross (US 2002/0073233 A1; June 13, 2002). Ans. 2–5.

The Examiner rejected claims 4, 11, and 18 under 35 U.S.C. § 103(a) as unpatentable over Banga, Gross, and Satapati (US 7,529,852 B2; May 5, 2009). Ans. 5–6.

## THE OBVIOUSNESS REJECTION OVER BANGA AND GROSS

The Examiner finds that Banga's method for determining if a DNS server is functionally limited teaches every recited element of claim 1 except

for the detected functional limitation causing the DNS server to send a response to the exploratory query based on reading less than all labels in that query. Ans. 2–3. The Examiner, however, cites Gross as teaching this feature in concluding that the claim would have been obvious. Ans. 3–4.

Appellant argues that the Examiner’s reliance on Gross is misplaced because Gross merely alters internet addresses by concatenating a compliant top-level domain (TLD) name to addresses with non-compliant TLD names to make those addresses compliant and resolvable by DNS servers. Br. 8–11.

#### ISSUE

Under § 103, has the Examiner erred in rejecting claim 1 by finding that Banga and Gross collectively would have taught or suggested a detected functional limitation of a DNS server causing that server to send a response to an exploratory query based on reading less than all labels in that query (“the response limitation”)?

#### ANALYSIS

We begin by noting that the Examiner’s reliance on the primary reference to Banga is undisputed, as is the cited references’ combinability. Rather, as noted above, this dispute turns solely on the Examiner’s reliance on Gross for teaching or suggesting claim 1’s response limitation. Therefore, we confine our discussion to Gross.

As noted above, a key aspect of the response limitation is that it is based on reading *less than all* labels in an exploratory query sent to a DNS

server. “Labels” in this context are groups of characters separated by periods in a domain name. Spec. ¶ 34.

In the rejection, the Examiner finds that Gross’ system sends a response indicating an error based on *reading the TLD*. Ans. 3. Notably, the Examiner finds that if *the TLD* is unrecognized in step 244 of Gross’ Figure 2b, a Name Space Provider (NSP) sends a negative response without examining the entire internet address, namely “www.idealab.inc.new.net.” Ans. 7–9 (citing Gross ¶¶ 41–43, 46, 50; Fig. 2b).

To be sure, Gross’ “New.net” NSP receives a modified internet address in step 242 of Figure 2b, namely “www.idealab.inc.new.net”—an address with the suffix “new.net” appended to the originally-entered “www.idealab.inc” address in step 216 of Figure 2a. *See* Gross ¶¶ 49–53. But the determination in step 244 of Figure 2b is based solely on whether *the TLD* is in a list and, if not, a negative response is sent in step 246. This determination, then, at least suggests that less than all labels, namely only those associated with the TLD—not the entire address—are read and used as a basis for sending the associated negative response. Appellant’s arguments regarding Gross’ alleged shortcomings involving address translation (Br. 8–11) do not squarely address—let alone persuasively rebut—the Examiner’s findings based on the TLD-based functionality in Gross’s Figure 2b noted above.

Therefore, we are not persuaded that the Examiner erred in rejecting claim 1, and claims 5–8, 12–15, and 19–21 not argued separately with particularity.

### THE OTHER OBVIOUSNESS REJECTION

We also sustain the Examiner's obviousness rejection of claims 4, 11, and 18. Ans. 5–6. Appellant reiterates similar arguments made in connection with claim 1 (*see* Br. 7, 11) that we find unpersuasive for the reasons previously discussed.

### CONCLUSION

The Examiner did not err in rejecting claims 1, 4–8, 11–15, and 18–21 under § 103.

### DECISION

The Examiner's decision rejecting claims 1, 4–8, 11–15, and 18–21 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED